

INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/000690

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: F02D 41/38, G01L 7/16, H01H 35/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: F02D, G01L, H01H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4788525 A (BRUNO LICHTENSTEIN), 29 November 1988 (29.11.1988), column 1, line 29 - column 2, line 14 --	1-9
X	US 5337718 A (CHARLES H. TUCKEY), 16 August 1994 (16.08.1994), column 3, line 4 - column 4, line 25 --	1-9
X	FR 2521341 (HENRI DENIS EYNARD ET AL), 12 August 1983 (12.08.1983), page 1, line 1 - page 7, line 27 --	1-9

Further documents are listed in the continuation of Box C.

See patent family annex.

- * Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search 1 March 2005	Date of mailing of the international search report 01 -04- 2005
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. + 46 8 666 02 86	Authorized officer Antonio Farieta/MN Telephone No. + 46 8 782 95 00

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 10 31 Augusti 1998 (1998-08-31) & JP 10125171 A (OMRON CORP), 15 May 1998 (1998-05-15) abstract and figures -- EP 0777247 A2 (TOYODA KOKI KABUSHIKI KAISHA), 4 June 1997 (04.06.1997), column 1, line 13 - column 4, line 6 -- EP 0565028 A1 (EATON CORPORATION), 13 October 1993 (13.10.1993), column 1, line 3 - column 2, line 45 -----	1-13
A		1-13
A		1-13

INTERNATIONAL SEARCH REPORT

Information on patent family members

30/01/2005

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US	4788525	A	29/11/1988	BR	8403488	A	18/02/1986
US	5337718	A	16/08/1994	DE	4317751	A	09/12/1993
				FR	2691752	A,B	03/12/1993
				JP	2549245	B	30/10/1996
				JP	7293399	A	07/11/1995
				US	5265644	A	30/11/1993
				DE	4440900	A,C	18/05/1995
				FR	2712634	A,B	24/05/1995
				JP	2859821	B	24/02/1999
				JP	7180629	A	18/07/1995
				US	5542395	A	06/08/1996
				US	5220941	A	22/06/1993
				DE	4332446	A	31/03/1994
				FR	2695964	A,B	25/03/1994
				JP	2103176	C	22/10/1996
				JP	6207566	A	26/07/1994
				JP	7111164	B	29/11/1995
				US	5406922	A	18/04/1995
FR	2521341		12/08/1983	NONE			
EP	0777247	A2	04/06/1997	DE	69632446	D	00/00/0000
				JP	9293436	A	11/11/1997
				US	5872345	A	16/02/1999
				JP	9147708	A	06/06/1997
EP	0565028	A1	13/10/1993	SE	0565028	T3	
				CA	2093054	A,C,E	11/10/1993
				DE	69315245	D,T	18/06/1998
				ES	2110536	T	16/02/1998
				US	5189269	A	23/02/1993